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ABSTRACT

School counselors must wade through many unconnected lists of interventions to plan the career guidance aspect of their work. Often this impedes their ability to think strategically about their career development efforts. This digest describes an attempt to discover the underlying taxonomic structure of career development interventions that occur in secondary schools in order to present counselors with a specific and structured approach. First, a comprehensive list was developed of career development interventions that commonly occur in schools. Once the list was compiled, the dimensions were established to describe school-directed programming. They included duration of the intervention; pedagogical style; location of intervention; size of the intervention; and control of the intervention. A survey was conducted to assess what career guidance professionals through were the best binomial descriptors that represented the interventions. From there, analysis produced a four-taxon solution. A list of the 44 interventions by taxon is included. (JDM)

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The Taxonomy of Career Development Interventions That Occur in America's Secondary Schools

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Overview

Every year millions of public and private dollars are spent on career development interventions for America's teenagers. However, no comprehensive listing of these interventions exists in the professional literature. The lack of such a listing hampers both practitioners and researchers in the area of career guidance. To remedy this situation, the Career Development Research Team of the National Research Center for Career and Technical Education conducted research with the aim to (1) identify a comprehensive list of career development interventions that occur in America's secondary schools, and (2) create a taxonomy of the identified interventions. Through consultation with career guidance practitioners and researchers from across the country, as well as through examination of research articles, grant reports, and program manuals, the Career Development Research Team established a comprehensive list containing 44 interventions. These 44 interventions were then rated on 5 variables (i.e., Time, Mode, Control, Place, & Size) by a random sample of the membership of the Guidance Division of the Association for Career and Technical Education. These ratings were then cluster analyzed. This analysis produced a four taxon solution. The taxa were (1) Work Based Interventions, (2) Advising Interventions, (3) Introductory Interventions, and (4) Curriculum Based Interventions.

Need for a Taxonomic Study

Every year millions of dollars are spent on career development interventions in America's public schools. Such expenditures are seen as a sound investment, as it is believed that they increase the relevance of education for the nation's youth. However, despite these benefits, no one has attempted to construct a taxonomy of career development interventions that occur in secondary schools. The production of such a taxonomy would benefit school counselors, administrators and other school personnel in three ways. First, this taxonomy would standardize career guidance language in terms of both content and structure. For instance, does the term career major mean the same as career pathway? Without a standardized language, it is difficult to engage in meaningful professional dialogues and conduct research. Second, this taxonomy would provide school counselors with a parsimonious framework to judge where their school's career guidance efforts are underdeveloped (Bailey, 1994). Moreover, school counselors can use this taxonomy to map their school's progress in the underdeveloped taxa (Brickell et al., 1974). Third, this taxonomy would make it possible to compare the efficacy of specific types of interventions against other types (e.g., school-based curricula vs. work-based learning). The current lack of knowledge about the comparative efficacy of career development interventions leaves school counselors with no alternative other than employing an inefficient and expensive "shotgun" approach to career development for America's youth.

Developing The Taxonomy

Given the benefits mentioned above, we set out to discover the underlying taxonomic structure of career development interventions that occur in secondary schools. Our first step was to develop a comprehensive list of career development interventions that commonly occur in these schools. We examined research articles, grant reports, and program manuals in order to develop this list. Drafts of this list were circulated to career development experts around the country for feedback. We then incorporated their feedback and a final list of 44 interventions was set. Amazingly, the list represents the first comprehensive articulation and demarcation of the universe of career development interventions.

The next step in creating this taxonomy was to decide what dimensions to use in assessing the 44 interventions. A total of 13 dimensions that can be used to describe school-directed programming were considered. However, to keep the survey a doable length, we decided to limit the rating dimensions to the five we felt would be the most "robust". By robust we mean the dimensions that lead to the most homogeneous taxa possible (Carmone, Kara, & Maxwell, 1999). Our selection of the five was done conceptually and was guided by Saylor and Alexander's (1966) influential text on curriculum planning. In particular, we were influenced by their six level model of factors that influence "the actual experiences provided pupils by the school" (p. 273). We rated as most robust those variables that occurred on the factor level that Saylor and Alexander held was most closely linked to actual student experiences. These five dimensions were (a) duration of the intervention [Time], (b) pedagogical style [Mode], (c) location of intervention [Place], (d) size of the intervention group [Size], and (e) control of the intervention's application [Control].

Our next step was to create a survey that asks career guidance professionals to assess the 44 interventions across the 5 dimensions. We sent this survey to a random sample of the membership of the Guidance Division of the Association for Career and Technical Education. The survey required participants to select the binomial descriptor that "best" represented an intervention. Brief definitions were provided for each descriptor. Specifically, for the Time dimension, the participant could circle S for Short (1 hour to 2 weeks) or L for Long (greater then two weeks). For the Mode dimension, the participant could circle P for Passive (listening, reading, viewing) or A for Active (hands on). For the Place dimension, the participant could circle S for School Based (on campus) or C for Community Based (off campus). For the Size dimension, the participant could circle G for Group (small group and above) or I for Individual (a student). Finally, for the Control dimension, the participant could circle Y for Youth Directed (control over time/scope/location) or A for Adult Directed (control over time/scope/location). In total, each participant made 220 ratings.

The final step was to submit these ratings to a statistical procedure called cluster analysis. Cluster analysis is a multivariate statistical technique used to determine naturally occurring groupings or categories (Wheeler & Kivlighan, 1995). At its most basic level, cluster analysis is the application of a set of rules (i.e., algorithm) for the dividing up a proximity matrix in order to form groups of similar objects (Borgen & Barnett, 1987). In this definition, the term "proximity matrix" refers to a matrix of similarities or dissimilarities between objects. Cluster analysis is commonly used to create taxonomies in a wide variety of fields. Our application of cluster analysis to career development interventions in secondary schools produced a four-taxon solution. A list of the 44 interventions by taxon appears at the end of this digest. One intervention in each taxon is marked with an asterisk. This intervention is statistical exemplar for that taxon.

Taxon Descriptions

Taxon 1: Work Based Interventions. We defined this taxon as follows: "The class of interventions designed to promote student self-efficacy and motivation through sustained and meaningful interactions with work sites in the community." Historically, this class of interventions has been limited

to Career and Technical Education students. However, one of the benefits of the School-to-Career movement in American education is that this class of interventions is beginning to be opened up to all students.

Taxon 2: Advising Interventions. We defined this taxon as follows: "The class of interventions designed to provide direction, resolve impediments, and sustain planfulness in students about their goals for the future." Eminent career development theorist Donald Super (Super, 1994; Super & Overstreet, 1960) felt that planfulness was a core element to successful career development in adolescence. This taxon was the only one of the school-based taxa described as delivered on an individual basis.

Taxon 3: Introductory Interventions. We defined this taxon as follows: "The class of interventions designed to awaken a student's interest in their own personal and professional growth." This taxon was similar to the fourth taxon with one exception. The modal Time variable descriptor for this taxon was "Strong Short" and the modal Time descriptor for the fourth taxon was "Strong Long." This difference emphasizes the introductory and preparatory nature of this class of interventions.

Taxon 4: Curriculum Based Interventions. We defined this taxon as follows: "The class of interventions designed to promote core student knowledge and skills through means and content relevant to the world of work." As noted in the previous section, the distinguishing characteristic of this taxon of interventions versus the other school-based taxa is its long-term nature. The interventions contained in this taxon represent the school-based complements to the interventions that are part of the Work Based Interventions taxon.

Conclusion

Presently, school counselors must wade through an endless and unconnected list of often ill-defined interventions to plan the career guidance part of their work. The problem with this present state is that it impedes the ability of school counselors to think strategically about their career development efforts. Our hope is that the taxonomy we have produced can help rectify this problematic state by bringing specificity and structure to career guidance work. For example, with our taxonomy, a school counselor can now ask a question such as, "In which of these four taxons is my school strong and in which does my school need to improve?" Moreover, the school counselor would have a standardized language to communicate these strengths and growth points to colleagues and supervisors.

References

Bailey, K. D. (1994). *Typologies and taxonomies: An introduction to classification in the social sciences.* Thousand Oaks, CA: Sage.

Borgen, F. H., & Barnett, D. C. (1987). Applying cluster analysis in counseling psychology research. *Journal of Counseling Psychology, 34,* 456-468.

Brickell, H. B., Aslanian, C. B., Grossman, R., Spak, L. J., Callaway, M., & Smith, K. S. (1974). *Taxonomy and profiles of career education, Volume I.* New York: Policy Studies of America, Educational Research Council of America. [ERIC Document Reproduction Service No. ED 106 516]

Carmone, F.J., Kara, A., & Maxwell,S. (1999). HINoV: A new model to improve market segment definition by identifying noisy variables. *Journal of Marketing Research, 36,* 501-509.

Saylor, J. G., & Alexander, W. M. (1966). Curriculum planning for modern schools. New York: Holt, Rinehart and Winston.

Super, D. E. (1994). A Life Span, life space perspective on convergence. In M. L. Savickas and R. W ! ent (Eds.), Convergence in career development theories (pp. 63-74). Palo Alto, CA: CPP Books.

Super, D. E., & Overstreet, P. (1960). The vocational maturity of ninth grade boys. New York: Bureau of Publications, Teachers College, Columbia University.

Wheeler, J. L., & Kivlighan, D. M. (1995). Things unsaid in group counseling: An empirical taxonomy. Journal of Counseling & Development, 73, 586-592

Taxonomy of Career Development Interventions

Work Based Taxon
- Cooperative Education
- Internship
- Job Shadowing
- Job Coaching
- Job Placement
- Mentorship Programs
- Service Learning/Volunteer Programs
- Work Based Learning Project
- Work Study
- Youth Apprenticeships*

Advising Taxon
- Academic Planning Counseling
- Career Focused Parent/Student Conference
- Career Peer Advising/Tutoring*
- Career Map
- Career Maturity Assessment
- Career Counseling
- Career Interests Assessment
- Career Library/Career Resource Center
- Career Cluster/Pathway/Major
- Career Passport/Skill Certificate
- College Admissions Testing
- Computer Assisted Career Guidance
- Cooperative/Dual Enrollment
- Information Interviewing
- Job Hunting Preparation
- Personal/Social Counseling
- Portfolio/Individual Career Plan
- Referral to External Training Programs
- Referral to External Counseling/ Assessment

Introductory Taxon
- Career Day/Career Fair*
- Career Field Trip
- Career Aptitude Assessment
- Community Members Teach In Classroom
- Guidance Lessons on Personal/ Social Development
- Guidance Lessons on Career Development
- Guidance Lessons on Academic Planning

Curriculum Based Taxon
- Career Information Infused Into Curriculum
- Career/Technical Education Course
- Career Skills Infused Into Curriculum
- Career Academy/Career Magnet School
- School-Based Enterprise
- Student Clubs/Activities
- Tech Prep/2+2 Curriculum*

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